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REMARKS/ARGUMENTS

As a result of this amendment, Claims 1 - 10, and 12 and 13 are in the application. The courteous telephone interview held with the Examiner on December 18, 2003 is acknowledged with appreciation.

In the outstanding Office Action, the Examiner made final his rejection of all claims then in the case as being obvious in view of three cited references. Prior to the interview, a proposed amendment to the claims was sent to the Examiner and was discussed during the interview. The Examiner stated that the current references did not show a curable adhesive in a pressure rupturable casing, as claimed in proposed new claim 13 and that the further specific structural language in proposed new claim 14 would be allowable over the references of record. This indication of patentable subject matter is acknowledged with appreciation.

By the present amendment to the application, proposed new claim 13 has been incorporated as a new positively claimed element in currently amended Claim 1 and proposed new claim 14 has been retained verbatim and numbered claim 13. Support for the pressure rupturable casing added to Claim 1 is found in the specification at page 5 lines 17 to 20. Support for the plunger

contacting and breaking the casings and urging the adhesive to spread out through a further chamber opening into the channel is shown in Figs. 1 and 2 and on page 6, lines 12-20.

Also by the present amendment, Claim 1 has been broadened by changing "plunger means" to simply "plunger" and "channel means" to simply "channel" to make clear that the sixth paragraph of 35 USC §112 does not apply. In addition, several of the existing dependent claims previously dependent on Claim 1 have been made dependent on newly added Claim 13, and Claim 9 has been amended by adding the word "head" after "compression" to obviate a possible indefiniteness, support therefor being contained in Claim 8 on which Claim 9 depends.

Rejection of the claims as being Obvious

In the outstanding Office Action, all claims in the case have been rejected under 35 USC §103 as being obvious over the basic Moulin patent in combination with the Gunay et al. And Murayama patents. The Examiner stated:

Moulin discloses the claimed optical fibre connector comprising a housing and an internal core member 17 defining a channel means for receiving an optical fibre sealed by spreadable adhesive 21. It is noted that Moulin lacks resilient members engaging with the fibers for retaining of the optical fibre. Murayama discloses connector provided with plunger means 73 and resilient means in the form of tabs for retaining terminals 65.

Therefore it would have been obvious to provide plunger means in combination with resilient means for Moulin optical fibre connector for sealing and retaining of his optical fiber in view of the teachings of Murayama. The use of curable gel adhesive is old and well known in the art for sealing of optical fiber connector and the use of plunger means in combination resilient fiber retaining means would provide retention of the fibers while spreading the adhesive at the same time.

The present invention is directed to a very small connector that is preloaded with a pressure rupturable casing containing a temperature ambient activated flowable adhesive that is used to connect fibre optic cable together.

The comments contained in the response previously filed on May 27, 2003, are incorporated herein by reference.

The Moulin reference discloses a connector that uses a heat activated adhesive, and thus an additional step of raising the temperature of the adhesive is required. However, by having the adhesive contained in a casing, the adhesive can be activated in a first embodiment by the oxygen in the ambient air or in a second embodiment by having two different parts of the adhesive in separate casings which set when mixed together in ambient conditions.

Newly added Claim 13 adds a further opening through which the plunger extends so that the plunger can contact the casing contained in the chamber and force the adhesive out the first

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mentioned opening. This has the advantage of simplicity and permits the connector to be smaller. There is no separate chamber to contain the adhesive in the Moulin patent.

Accordingly, it is submitted that the claims currently in the application are now in condition for allowance and such action is respectfully solicited. If the Examiner believes the application is not in condition for allowance, Applicant respectfully requests that the Examiner contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

Respectfully submitted,
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APPENDIX A

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) An optical fibre connector comprising a housing, and an internal core member defining a channel means for receiving which can receive an optical fibre, an enclosed [[a]] chamber in the housing having an opening therein which places the chamber in communication with the channel means, the connector including a pressure rupturable casing containing a spreadable, curable adhesive and located in the chamber, a plunger which upon actuation reduces means to reduce the volume of the chamber, whereby a quantity such that the spreadable, curable adhesive contained in the chamber is spread out through the chamber opening into the channel and urged around

an optical fibre disposed in the channel ~~by said plunger means~~
before the adhesive cures.

2. (Currently amended) A connector according to claim 13, in
which the adhesive comprises a two-part epoxy adhesive in which
the respective parts are contained in respective pressure
rupturable frangible casings.

3. (Currently amended) A connector according to claim 13, in
which the plunger ~~means~~ included a fibre-engaging resilient ~~means~~
member.

4. (Currently amended) A connector according to claim 3, in
which the resilient member ~~means~~ is directionally biassed to
maintain on the fibre in use a force which urges the fibre [[it]]
towards the front end of the connector.

5. (Currently amended) A connector according to claim 13,
further including a ferrule at the front end, the ferrule
carrying an optical fibre as a stub having a distal end flush
with the front face of the ferrule and a proximal end extending

from the rear face of the ferrule and terminating in an alignment tube coaxial with the channel ~~means~~ of the internal core member.

6. (Original) A connector according to claim 5, in which the fibre stub end has a frusto-conical shape with a flat end face of reduced diameter.

7. (Previously presented) A connector according to claim 13, in which the plunger ~~means~~ comprises a compression head which is directly activatable to reduce the volume of the chamber and apply pressure to the adhesive therein.

8. (Currently amended) A connector according to claim 1, in which the plunger ~~means~~ is indirectly activatable and comprises a compression head within the housing and a co-operating activation member which extends from the housing and which is manually movable to cause the compression head to reduce the chamber volume.

9. (Currently amended) A connector according to claim 8, in which the compression head comprises a sloping ramp surface which co-operates with a sloping ramp surface on the activation member,

or in the housing itself, to translate axial movement of the activation member relative to the housing to radially-inward movement of the compression head.

10. (Currently amended) A connector according to claim 1, in which the plunger ~~means~~ includes means cooperable with the housing to maintain the compression head in the inner position.

11. (Canceled).

12. (Previously presented) A connector according to claim 1, in which the adhesive comprises an air-curable adhesive in which the adhesive is contained in a rupturable air-impervious container.

13. (New) A connector according to Claim 1, wherein the adhesive is contained in a plurality of pressure rupturable casings, and in which said chamber has a further opening through which the plunger extends so that upon actuation of the plunger, the plunger can contact and break the pressure rupturable casings so that the adhesive contained in the casings is urged to spread out through the first mentioned chamber opening into the channel.